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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,258	01/10/2002	Hiroyoshi Komobuchi	MTS-082US1	9113
7590	03/24/2005		EXAMINER	
Allan Ratner Suite 301 One Westlakes, Berwyn P.O. Box 980 Valley Forge, PA 19482-0980			NGUYEN, LUONG TRUNG	
			ART UNIT	PAPER NUMBER
			2612	
			DATE MAILED: 03/24/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/044,258	KOMOBUCHI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	LUONG T NGUYEN	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 9-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 9-18 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10 January 2002 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. 08/261,841.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>01/10/02</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 08/261,841, filed on 6/17/1994.

### ***Claim Objections***

2. Claim 16 is objected to because of the following informalities:

Claim 16 is objected because claim 16 is a duplicate claim of claim 15.

Appropriate correction is required.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 9-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 6,392,700. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons discussed below.

Regarding Application Claims 9-10, the limitations of these claims are encompassed in Patent Claims 1-2. It is noted that the Application Claims 9-10 do not recite limitation “**in each field**,” which is recited in Patent Claim 1, in setting only a single first signal charge period and only a single second signal charge period for each one of the plurality of unit pixel means; and in setting the single first signal charging period of a first unit pixel means and the single first charging period of a second unit pixel means; and setting the single second signal charging period of the first unit pixel means and the single second signal charging period of the second unit pixel means.

Regarding Application Claims 11-12, the limitations of these claims are encompassed in Patent Claims 3-4. It is noted that the Application Claims 11-12 do not recite limitation “**in each field**,” which is recited in Patent Claim 3, in setting only a single first signal charge period and only a single second signal charge period for each one of the plurality of unit pixel means; and in setting the single second signal charging period of a first unit pixel means and the single second signal charging period of a second unit pixel means.

Regarding Application Claim 13, the limitations of the claim is encompassed in Patent Claim 5. It is noted that the Application Claim 13 does not recite limitation “**during one frame or field**,” which is recited in Patent Claim 5, in setting a first signal charging period and a second signal charging period for each one of the plurality of unit pixel means; and in setting the second signal charging period for the two unit pixel means.

Regarding Application Claims 14-18, the limitations of these claims are encompassed in Patent Claims 6-8. It is noted that the Application Claims 14-18 do not recite limitation “**during one frame or field of a video signal,**” which is recited in Patent Claim 6, in setting a first signal charging period and a second signal charging period for each one of the plurality of unit pixel means.

In view of the above, since the subject matters recited in the Application Claims 9-18 were fully disclosed in and covered by the Patent Claims 1-8 of U. S. Patent No. 6,392,700, allowing the Application Claims 9-18 would result in an unjustified or improper timewise extension of the “right to exclude” granted by a patent. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993).

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yokoyama (U. S. Patent No. 5,239,380) discloses method of driving and a solid state imaging device by two-step signal charge vertical transfer in one horizontal blanking period.

Nam (U. S. Patent No. 5,243,180) discloses solid-state image sensor with paired photodiode concerned to respective vertical CCD channels.

Wakagi et al. (U. S. Patent No. 5,278,661) discloses image pickup apparatus wherein output signals in one field are transferred two filter elements and in the other field they are first transferred one filter element and subsequently a second filter element.

Tanigawa et al. (U. S. Patent No. 5,894,143) discloses solid-state image pick-up device for the charge-coupled device type synchronizing drive signals for a full-frame read-out.

6: Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T NGUYEN whose telephone number is (703) 308-9297 or (571) 272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929 or (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN LN  
3/19/05

*Luong T. Nguyen*

LUONG T. NGUYEN  
PATENT EXAMINER